

ABSTRACT

An oil pump rotor assembly for an oil pump which enables reduction of noise while preventing pump performance and mechanical efficiency from being degraded. In this oil pump rotor assembly, the tooth tip profile of each of at least one of external teeth of an inner rotor and internal teeth of an outer rotor the inner rotor is formed such that a base cycloid curve is divided at a midpoint thereof to obtain two tooth curve segments, and the two tooth curve segments are separated by a predetermined distance along the circumference of a base circle or in the direction of a tangent of the base cycloid curve drawn at the midpoint thereof and are smoothly connected to each other using a curve or a straight line.